

Memorandum

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for Craig M. Wilson
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From : STATE WATER RESOURCES CONTROL BOARD
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Subject: APPLICATION OF STATE WATER BOARD RESOLUTION NO. 68-16
("STATEMENT OF POLICY WITH RESPECT TO MAINTAINING HIGH QUALITY
WATERS IN CALIFORNIA") TO CLEANUP OF CONTAMINATED GROUND WATER

ISSUE

At a recent meeting of the Ground Water Task Force an issue arose as to the whether State Water Resources Control Board (State Water Board) Resolution No. 68-16 ("Statement of Policy With Respect to Maintaining High Quality Waters in California") applies to cleanups of contaminated ground water.

RESPONSE

Resolution No. 68-16 applies to ground water cleanups.

DISCUSSION

State Water Board Resolution No. 68-16 establishes the policy that high quality waters of the State "shall be maintained to the maximum extent possible" consistent with the maximum benefit to the people of the State. It provides:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high

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quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

Resolution No. 68-16 applies to the maintenance of "high quality waters" and applies to discharges of waste to existing high quality waters. The policy does not absolutely require that existing high quality water be maintained; rather, any change must be consistent with maximum benefit to the people, not unreasonably affect beneficial uses, and comply with applicable water quality control policies, which includes water quality objectives in water quality control plans. In addition, any discharge of waste to high quality waters must meet requirements that result in best practicable treatment or control that at least prevent a pollution or nuisance, but also maintains the highest water quality possible consistent with the maximum benefit to the people of the State.

Resolution No. 68-16 satisfies the requirement that the State have a policy which, at a minimum, is consistent with the federal antidegradation policy (40 CFR § 131.12). The State Water Board has interpreted Resolution No. 68-16 to incorporate the federal antidegradation policy. Resolution No. 68-16 applies to both ground water and surface water. The federal antidegradation policy applies only to surface water.

The question is whether State Water Board Resolution No. 68-16 applies to the determination of in-situ ground water cleanup levels. Resolution No. 68-16 applies to such determinations because it applies to "discharges" of waste, including unauthorized discharges, that occurred after adoption of the policy in 1968. It also applies to such determinations because the presence of pollution in soil or ground water constitutes a "discharge" of waste¹ since polluted ground water migrates to areas of higher quality ground water. Because the policy requires that high quality waters be maintained and requires that activities which may result in a discharge of waste be controlled, the policy applies to the cleanup of in-situ ground water.

In applying Resolution No. 68-16, the State and Regional Water Boards use essentially a two-step process. The State or Regional Water Board first determines, based on the criteria in Paragraph 1 of the policy, whether some degradation will

¹ The State Water Board has interpreted the term "discharge" in the Water Code to include the movement of waste from soils to ground water and from contaminated to uncontaminated ground water. See State Water Board Order No. WQ 86-2.

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(1) be consistent with the maximum benefit to the people of the State, (2) will not unreasonably affect present and anticipated beneficial use of such water, and (3) will not result in water quality less than that prescribed in the policies. With regard to contaminated ground water, the determination is whether the degradation be allowed to remain.

Second, Paragraph 2 of the policy requires that if degradation is allowed, the action that results in the discharge must meet requirements which will result in the "best practicable treatment or control of the discharge"² necessary to prevent pollution or nuisance and assure that the highest water quality consistent with maximum benefit to the people of the State will be maintained. In other words, the discharger must apply best practicable treatment or control to the discharge and that treatment or control must at least prevent pollution or nuisance. Such treatment or control includes cleaning up the polluted ground water and maintaining hydraulic control of the polluted ground water to prevent further migration during the cleanup process.³

Compliance with Resolution No. 68-16 will result in cleanup levels ranging between background water quality and applicable water quality objectives.⁴ The Regional Water Boards, in

² The term "best practicable treatment or control" is not defined in the Resolution or the California Water Code. The State Water Board has focused on what level of treatment or control is technically achievable using "best efforts". See State Water Board Order Nos. WQ 81-5, 82-5, and 90-5.

³ The process of cleaning up polluted ground water may also result in new discharges where the cleanup process used is to extract and treat the polluted ground water. The treated water may be discharged, for example, to ground water, to surface water, to land for irrigation, or as industrial supply. Resolution No. 68-16 applies to discharges of the treated water to ground or surface water. Resolution No. 68-16 is applied separately to each activity. Thus, applying Resolution No. 68-16 to the determination of in-situ cleanup levels may result in a different numeric standard than when applying Resolution No. 68-16 to the discharge of treated water to ground or surface water. Economic considerations and best practicable treatment or control will vary depending on the activity and site-specific considerations. See "California State Ground Water Quality Law", Andrew H. Sawyer (October 29, 1987) at 29-31. See also State Water Resources Control Board Order No. WQ 86-8, which applied Resolution No. 68-16 in determining cleanup levels of ground water at a site in the San Francisco Bay Region.

⁴ Resolution No. 68-16 requires prevention of pollution and nuisance. The term "pollution" is defined by reference to beneficial uses and, therefore, if the cleanup complies with water quality objectives it would protect the beneficial uses. The term "nuisance" is defined by reference to the impacts to public health, aesthetics, and use of property. In some circumstances, the existence of a nuisance may require a more stringent cleanup level than necessary to protect beneficial uses.

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establishing implementation measures and time schedules for cleanup, may consider technical and economic obstacles to prompt compliance with objectives. See Cal. Water Code Section 13242. If, after implementation of best practicable treatment or control measures, it is determined that it is not feasible to attain water quality objectives, the Regional Water Boards have several options. The Regional Water Boards may require ongoing monitoring to evaluate changes in water quality, implementation of a different technology for cleanup, or other abatement measures. The Regional Water Boards may also amend the Water Quality Control Plan to dedesignate a beneficial use if it can be justified under applicable requirements, such as State Water Board Resolution No. 88-63 ("Sources of Drinking Water Policy"). Final closure of a site where a pollution or nuisance exists and beneficial uses have not been protected would not comply with applicable policies, including Resolution No. 68-16.

Resolution No. 68-16, as applied to ground water cleanups, is consistent with the Porter-Cologne Water Quality Control Act (codified in the California Water Code). The California Water Code establishes requirements for the determination of cleanup levels. The Water Code requires that the goal of cleanups is to restore water quality to the highest water quality that is reasonable. Water Code Section 13000 establishes the policy that activities that affect water quality:

"... shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and total values involved, beneficial and detrimental, economic and social, tangible and intangible."

Water Code Section 13304 requires the person(s) responsible for a discharge of waste to "clean up such waste or abate the effects thereof...." "Clean up" means removal of the waste, while "abate" means to reduce the amount of or lessen the effect of the waste. Section 13304 also requires that the cleanup or abatement actions prevent pollution and nuisance, in other words, that the cleanup or abatement action protect the waters of the state for beneficial uses. Thus, the goal of a cleanup under Sections 13000 and 13304 would be to restore water quality to its background condition, i.e., "clean up" the waste, but the cleanup must at least protect the beneficial uses, i.e., attain the water quality objectives in water quality control plans. Cleanups must also comply

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with applicable water quality control plans, policies, and regulations of the State and Regional Water Boards.⁵

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⁵ For example, Title 23, California Code of Regulations, Division 3, Chapter 15 (Discharges of Waste to Land) contains regulations that apply to corrective action of ground water and soil. See "The Applicability of Chapter 15 to Cleanups" Memorandum from Craig M. Wilson to James Cornelius (February 2, 1994). Additionally, the proposed State Water Board Resolution No. 92-49, which applies to cleanup and abatement activities pursuant to Water Code Section 13304, requires that cleanups be consistent with Resolution No. 68-16.

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